

Session ID: IDD-11

Title

STRUCTURAL CONTROL DEVICES TO MITIGATE SEISMIC VULNERABILITY

Convenors

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Description

The technical session Structural Control Devices to Mitigate Seismic Vulnerability aims to explore the latest developments and applications of various structural control devices in reducing the seismic vulnerability of buildings, facilities, equipment, and heritage structures. The session will bring together experts, researchers, engineers, and practitioners from academia and industry to share their knowledge, experience, and research findings in the field of earthquake engineering.

The session will cover a range of structural control devices (with passive, semi-active or active signature) including both conventionally available and futuristically pioneered devices, isolators, different types of dampers, and traditional bracing systems. Control devices have been widely used in structural engineering to reduce the impact of excitations on various structures. The session will focus on the application of these devices in mitigating the seismic vulnerability of buildings, skyscrapers, strategic and industrial facilities, special equipment, historic heritage structures, statues, bridges, footbridges, and many other structures in the built environments.

The session will provide a platform for participants to share their research findings, case studies, and best practices in the use of structural control devices in earthquake engineering. The session will also explore the challenges and opportunities in the design, installation, and maintenance of these devices toward sustainability.

Overall, the technical session Structural Control Devices to Mitigate Seismic Vulnerability will be a valuable opportunity for researchers, engineers, and practitioners to exchange knowledge and experiences in the field of structural earthquake engineering and to advance the use of structural control devices in mitigating seismic vulnerability.

Invited Speakers

P. Clemente ⁵, F. Potenza ⁶, P. Nawrotzki ⁷, X. Wang ⁸, B. Ozturk ⁹, L. Ragni ¹⁰, O.B. Sadan ¹¹, T. Saito ¹²

Affiliations

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